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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/918,360	07/30/2001	Ronald P. Knockeart	09650-012001/2000P07793US	1067

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SIEMENS CORPORATION
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EXAMINER

LERNER, MARTIN

ART UNIT	PAPER NUMBER
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2654

DATE MAILED: 08/25/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/918,360

Applicant(s)

KNOCKEART ET AL.

Examiner

Martin Lerner

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1 to 18 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1 to 18 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 5/10/02 & 5/9/03.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

DETAILED ACTION

Specification

1. The disclosure is objected to because of the following informalities:

On page 6, line 18, "heading" should be –hearing–.

Appropriate correction is required.

Claim Objections

2. Claims 3 and 10 objected to because of the following informalities:

There should be a period at the end of these claims. Appropriate correction is required.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

4. Claims 1, 2, 4 to 7, 11, 12, and 18 are rejected under 35 U.S.C. 102(a) as being anticipated by *French-St. George et al.* ('030).

Regarding independent claim 1, *French-St. George et al. ('030)* discloses a method for management of speech and audio prompts in multimodal interfaces, comprising:

“prompting a user of the device using a combination of a visual prompt and an audible prompt, including” – a multi-modal user interface provides a telecommunications system and methods to facilitate multiple modes of interface with users using voice, hard keys, touch sensitive soft key input, and pen input; the system provides for voice or key input of data, and for graphical and speech data output (column 5, lines 53 to 67: Figure 3); according to a first embodiment, a multimodal user interface includes a speech interface for speech input and output and for accessing a speech recognizer, and non-speech interfaces for tactile input and graphical output (column 6, lines 15 to 23: Figure 3); firstly the system or device prompts the user for input, and receives input from the user by one of the number of possible interface modalities (column 7, lines 56 to 59: Figure 4);

“presenting a set of input choices” – one example is YahooTM Yellow PagesTM, which is a multi-layer application, where prompts are selected associated with that layer; for example, the layers of the Yellow Pages directory are: identify service, identify city/state, identify business category, and display business name; the background layer will communicate a method of returning to selection of other services, a list of services available, and that the user may select a service by touching or speaking, or, if appropriate, the service name (column 7, line 64 to column 8, line 6; column 8, lines 34 to 37: Figures 3 and 5);

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“accepting a command from the user to provide an audible prompt” – if the speech recognizer is off, the system determines whether a “touch-to-talk” option is selected, i.e. receiving input from a touch sensitive button on the display; if yes, the speech interface is turned back on, into foreground state and the system issues a speech prompt for input; this option provides the user with one way of turning the speech prompts back on (column 9, lines 43 to 52: Figure 7);

“in response to said command, playing an audible prompt that identifies one or more of the set of input choices” – if yes, the speech interface is turned back on, into foreground state and the system issues a speech prompt for input; this option provides the user with one way of turning the speech prompts back on (column 9, lines 43 to 52: Figure 7); as indicated in the flow chart, for example, if the speech recognizer is on, corresponding speech prompts will be played (column 8, lines 59 to 51: Figure 6);

“accepting an input from the user in response to the visual and audible prompts” – if a command word is received, the system executes the command, or otherwise determines if there is a match to city/state to allow a move to the next layer, when there is a further prompt for input (column 10, lines 15 to 19); on selection of the business sub-category, a user will select a business sub-category from those displayed by touch, or speak a selection from the business sub-category within the time recognition window (column 8, line 65 to column 9, line 11: Figure 6).

Regarding independent claim 18, *French-St. George et al. ('030)* further discloses a method for management of speech and audio prompts in multimodal interfaces, comprising:

“a user interface including, a graphical display, a manual input device, an audio output device, and an audio input device” – a multi-modal user interface provides a telecommunications system and method to facilitate multiple modes of interface with users using voice, hard keys, touch sensitive soft key input, and pen input; the system provides for voice or key input of data, and for graphical and speech data output (column 5, lines 53 to 67: Figure 3); mobile telephone unit 100 comprises a body 200 which carries a display screen 210 for the graphical user interface (“a graphical display”), conventional keypad 220 and other hard keys 222 (“a manual input device”), speaker 240 associated with the speech interface for providing speech prompts (“an audio output device”), and a speech recognizer to accept and interpret speech input (“an audio input device”)(column 6, lines 1 to 12: Figure 2);

“a controller coupled to the user interface configured to” – the device comprises means for dynamically switching between a background state of the speech interface and a foreground state of the speech interface in accordance with a user's input modality choice (column 6, lines 15 to 23).

Regarding claim 2, *French-St. George et al. ('030)* discloses the background layer will communicate a method of returning to selection of other services, a list of services available, and that the user may select a service by touching or speaking, or, if

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appropriate, the service name (column 7, line 64 to column 8, line 6; column 8, lines 34 to 37: Figures 3 and 5); a list of services, or a list of recent locations, “includes graphically presenting a list of the set of choices.”

Regarding claim 4, *French-St. George et al. ('030)* discloses if the speech recognizer is off, the system determines whether a “touch-to-talk” option is selected, i.e. receiving input from a touch sensitive button on the display; if yes, the speech interface is turned back on, into foreground state and the system issues a speech prompt for input; this option provides the user with one way of turning the speech prompts back on (column 9, lines 43 to 52: Figure 7); receiving an input from a touch sensitive button on the display to activate a “touch-to-talk” option is equivalent to “accepting the command from the user to provide an audible prompt includes accepting a manual command.”

Regarding claim 5, *French-St. George et al. ('030)* discloses an embodiment where the speech recognizer is brought into the foreground state when only a speech command is received (Figure 7: “Valid Speech Token?”: Yes), so that T-spoken tokens are returned (Figure 7: “Return tokens: T-written, T-spoken, T-touched”).

Regarding claims 6 and 7, *French-St. George et al. ('030)* discloses that, as indicated in the flow chart, for example, if the speech recognizer is on, corresponding speech prompts will be played (column 8, lines 59 to 51: Figure 6); for example if the service layer is selected the display will show “Service selection layer” and play an audio speech prompt associated with the service selection layer (column 8, lines 40 to 42: Figure 3); an audio speech prompt associated with the service selection layer is “an

audible representation of the one or more of the choices” and “a spoken description of the choices.”

Regarding claims 11 and 12, *French-St. George et al. ('030)* discloses, according to a first embodiment, a multimodal user interface including a speech interface for speech input and output and for accessing a speech recognizer, and non-speech interfaces for tactile input and graphical output (column 6, lines 15 to 23; Figure 3); on selection of the business sub-category layer, a user will select a business sub-category from those displayed by touch, or speak a selection from the business sub-category (column 8, line 66 to column 9, line 2); thus, either manual input or spoken input is accepted in response to a set of choices in any layer.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 3 and 8 to 10 rejected under 35 U.S.C. 103(a) as being unpatentable over *French-St. George et al. ('030)* in view of *Gazdzinski*.

French-St. George et al. ('030) does not expressly disclose that the speech prompts provide a list of the set of choices, that a speech synthesis algorithm produces the spoken description, that the representation of choices includes accessing a stored audio representation of the spoken description, or that the spoken description is

received from a remote location. However, all of these features are common for interactive voice response systems.

Gazdzinski teaches a similar "smart" elevator system and method, where a user is prompted on an interactive building directory having a speech recognition system and other input devices such as a touch pad to determine if the user desires to select the floor of a firm that they are trying to locate. (Column 3, Lines 1 to 18) Specifically, the user initiates the "Building Directory" function by pressing a function key, whereupon a signal is generated which prompts the system with an audible and/or visual query to the user, depending upon how the system is pre-configured. For an audible query, the subsystem retrieves a pre-stored CELP (or other compressed format) data file from one of storage devices 108, 110 ("accessing a stored audio representation of the spoken description") and converts that file to an analog audio representation of voice via the speech synthesis module 112 ("speech synthesis algorithm"). (Column 8, Lines 29 to 49: Figure 4) Also, a central server 170 is located remotely from the elevator, and various components may be disposed in many different arrangements within the system, inter alia, on the server. (Column 7, Line 56 to Column 8, Line 19: Figures 1 and 3) Thus, it is suggested that the pre-stored CELP data file may be stored on the server ("receiving data characterizing the spoken description from a remote location"). Finally, the "Building Directory" function provides prompts audibly via the speech synthesis module 112 or visually via the display 113. For multiple matching entries, the audible prompts are produced in a sequential, predetermined order. For example, the first matching entry (alphabetically) would be synthesized, followed by the second entry,

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etc., until the user states "Stop", to choose the entry desired. (Column 9, Lines 2 to 16)
Thus, there is disclosed an embodiment for "presenting the set of input choices includes audibly presenting a list of the set of choices."

The objective is to provide information to a person riding in an elevator and to determine the location of a person, firm, or store within a building as a convenient alternative to building directories posted in the lobby of the building. (Column 1, Lines 20 to 51) It would have been obvious to one having ordinary skill in the art to provide the techniques of speech synthesis of stored audio representations from a remote location as a spoken list of a set of choices as taught by *Gazdzinski* in the multi-modal interface of *French-St. George et al.* ('030) for the purpose of providing a convenient alternative to a building directory.

7. Claims 13 to 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over *French-St. George et al.* ('030) in view of *Kamei et al.*

French-St. George et al. ('030) discloses a method of sorting through inputs when valid tokens are returned for more than one mode, i.e. touch input, pen input, and speech input. Specifically, *French-St. George et al.* ('030) generally prefers touch input over speech input when both are received, so spoken input is rejected, unless the speech recognizer is on. (Figure 7) Arguably, "the environment" can be read to include what sorts of input are received in the context of whether the speech recognizer is in the foreground or in the background. However, *French-St. George et al.* ('030) does not disclose or suggest an environment including a motor vehicle, wherein the speed of the

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vehicle is monitored, and manual input is rejected when the speed of the vehicle exceeds a threshold speed. However, *Kamei et al.* teaches an automatic dial telephone usable in a motor vehicle by speech recognition, where a safety confirmation procedure determines whether or not a speed detected by a speed detector is smaller than a predetermined reference speed. (Column 8, Line 51 to Column 9, Line 7: Figure 4: Step 43) The safety confirmation procedure is employed in a variety of contexts, so that automatic dialing is performed only under safe driving conditions. (Column 1, Lines 61 to 64) It would have been obvious to one having ordinary skill in the art to inhibit manual or spoken input in a motor vehicle in an environment where the speed of the vehicle exceeds a threshold speed as suggested by *Kamei et al.* in the multi-modal interface of *French-St. George et al.* ('030) for the purpose of performing automatic dialing only under safe driving conditions.

Conclusion

8. The prior art made of record and not relied upon is considered pertinent to Applicants' disclosure.

French-St. George et al. ('711), Smith et al., King, Walters et al., Ito, Everhart et al., Holzman et al., Wilson, and Douglas disclose related art.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Martin Lerner whose telephone number is (703) 308-9064. The examiner can normally be reached on 8:30 AM to 6:00 PM Monday to Thursday.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richemond Dorvil can be reached on (703) 305-9645. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

ML
8/16/04


Martin Lerner
Examiner
Group Art Unit 2654